

Biography

Department of Defense



Dr. Keith Alan Krapels

**Director, Command, Control, Communications,
Computers, Cyber, Intelligence, Surveillance,
Reconnaissance, and Electromagnetic Warfare
Under Secretary of Defense (Research and Engineering)**



Dr. Keith Krapels is a member of the Senior Executive Service and serves as the Director of the Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, Reconnaissance, and Electromagnetic Warfare office in USD(R&E). C5ISREW is the principal DoD organization for applied research and advanced technology development in sensors, communications and countermeasures, command & control and the component technology to build those systems. C5ISREW oversees and coordinates with and between the Service research laboratories and the FFRDCs. Additionally, C5ISREW has an annual budget of over \$65 million.

CAREER CHRONOLOGY:

- June 2018 - March 2021: Director, Sensors & Electronics Devices Directorate, Army Research Lab
- May 2008 – May 2018: Director, Modeling, Simulation & Netted Sensors Division, US Army Research, Development & Engineering Command (RDECOM), Communication-Electronics Research Development & Engineering Center (CERDEC), Night Vision & Electronics Sensors Directorate (NVESD)
- Sep 2011 – Aug 2012: Chief of Advisors to the Ministry of Interior/Afghan National Police Headquarters, NATO Training Mission-Afghanistan (Retired from the Navy Reserve at the rank of Captain following 36 years, 14 active duty and 22 reserve)
- Jan 2005 - Apr 2008: Program Manager, Electronic Warfare (EW) & Electro-optical/infrared (EO-IR) Sensor Technology, Office of Naval Research (ONR)
- Sep 2003 – Dec 2004: Program Officer, EW & EO-IR Sensors, ONR
- Dec 2001 – Aug 2003: Rapid Fielding Officer, ONR
- Jun 1999 – Nov 2001: Electronics Engineer, US Army RDECOM CERDEC NVESD
- Jun 1998 – May 1999: Research Associate/Doctoral student, Electrical & Computer Engineering Department (EECE Dept), University of Memphis (UofM)
- Oct 1996 – Apr 1998: Electronic Warfare Special Projects Officer, Naval Research Laboratory
- Jul 1993 – Sep 1996: Electronic Counter Measures Officer/Mission Commander for EA-6B Aircraft, US Navy Tactical Electronic Warfare Squadron-141
- Sep 1990 – Jun 1993: Aviation Officer in training, US Navy
- Sep 1987 – Aug 1990: Research Associate/Doctoral student, EECE Dept, UofM
- Jan 1987 – Aug 1987: Infrared Systems Engineer, Martin Marietta Orlando Aerospace
- Jan 1985 – Dec 1986: Research Assistant/Masters Student, EECE Dept, UofM
- Jul 1983 – Aug 1985: Imagery Analyst, 836th MI Co. (Div), US Army Reserve
- Jul 1980 – Jul 1983: Cadet, United States Corps of Cadets, USMA

COLLEGE:

- Ph.D., Electrical Engineering, University of Memphis, 2000
- MSEE, Electrical Engineering, University of Memphis, 1986
- BS, Applied Mathematics, University of Memphis, 1984

SIGNIFICANT TRAINING:

- USN Fleet Replacement Electronic Counter Measures Officer Course, 1993
- USN Aviation Electronic Warfare Officer Course, 1992
- USN Naval Flight Officer, 1992
- US Army Intelligence Imagery Analyst Course, 1984

CERTIFICATIONS:

- Defense Acquisition University, Science & Technology Manager, level 3

AWARDS AND HONORS:

- Defense Meritorious Service Medal for Afghan National Police HQ development, 2012
- Assistant Secretary of the Navy (Research, Development & Acquisition) Acquisition Excellence Award for Technology Transition of the Multi-Function Electronic Warfare (MFEW) to the Surface Electronic Warfare Improvement Program (SEWIP), 2011
- Navy Meritorious Service Medal for service as Commanding Officer of ONR reserve unit, 2011
- Assistant Secretary of the Army (Acquisition, Logistics & Technology) Research and development Achievement Award for advanced infrared camera imagery improvement software, 2007
- Navy Commendation Medal – for passive millimeter wave sensor field testing and performance characterization, 2007
- National Military Sensing Symposia Chairperson Award, 2006
- Navy Meritorious Service Medal for fielding Silver Fox UAV in Operation Iraqi Freedom, 2003
- Navy Achievement Medal for multi-wavelength fusion system performance modeling, 2000
- Navy Commendation Medal for rapid deployment of developmental AN/UYX-3F Specific Emitter Identification EW system, 1998
- Navy Commendation Medal with combat “V” for successful attack on Serbian air defenses, 1995
- Navy Achievement Medal for developing of training and tactics for newly introduced AN/USQ-113V communications countermeasures system, 1995
- Air Medal (two awards), strike/flight for 53 combat missions/flights, 1993-1995

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS:

- Fellow, Military Sensing Symposia
- Fellow, International Society for Optics and Photonics
- Optical Society of America
- Association of Old Crows (Electronic Warfare Professional Society)
- Association of the US Army

MAJOR PUBLICATIONS:

- Dr. Krapels has published extensively in the area of military sensors. He authored 20 journal papers, 85 conference papers and one patent. He chaired two professional society conferences and was an editor for two optical engineering reference works.